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09/603,939

06/27/2000

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7590 10/31/2007  
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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/603,939  
Filing Date: June 27, 2000  
Appellant(s): GRAUMANN, DAVID L.

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Kevin J. Carroll  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 08/01/2007 appealing from the Office action mailed 08/16/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,876,617	BEST et al	10-1989
6,584,138	NEUBAUER et al	06-2003

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4,035,838

BASSANI et al

07-1977

Boney, et al, "Digital Watermarks for Audio Signals" 1996 IEEE International Conference on Multimedia Computing and Systems, (June 19-23, 1996), Hiroshima, Japan, pp. 473-480.

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

The grounds of rejection are applied to claims 1-20 and 30-36 under 35 U.S.C. § 102(b) or under 35 U.S.C. § 103(a) for the reasons set forth in the final rejection of the office action dated 06/16/2006.

### **(10) Response to Argument**

Appellant's arguments filed 08/01/2007 have been fully considered but they are not persuasive.

Appellant's arguments regarding Claims 30, 31, 33, 34 and 36 (Appellant apparently misquoted claim 31 instead of claim 30 as independent claim in the arguments) on page 12-14 of the Appeal Brief that Best et al. does not disclose generating a masking signal that falls entirely within one portion of the range of frequencies or generating a data signal that falls entirely within the range of frequencies and apart from the one portion. This is not persuasive as Best et al. discloses generating a masking signal (signals from filters 10 and 11 in a frequency range of 1KHz to 6KHz) that falls entirely within one portion of the range of frequencies (the

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frequency range of 1Kz to 6KHz will fall entirely within the frequencies of notch filter of 2883Hz, i.e. one portion of the of the range of frequencies) and generating a data signal that falls entirely within the range of frequencies and apart from the one portion (Filter 16 produces a data signal by band pass filter 16 at 3417 Hz which is apart from the one portion around 2883 Hz). Therefore, independence claim 30 is met by Best et al.

Appellant further argues on page 13 that Best et al. Fig. 4 does not disclose filter the data signal in the frequency range from the masking signal. This is not persuasive as Fig. 4 discloses filtering after band-pass filter of 3417 Hz and is inherent that filtering after band-pass filter of 3417Hz must filter the data signal in order to produce a data signal (Fig. 4, DATA output) which is free of noise in order to produce a useable output.

In response to appellant's argument on page 14 with regard to claim 32, Best discloses the masking signal (between 1 kHz to 6 kHz) falls within a critical band of the data signals (bands of notch filters 15) as shown in Fig. 1.

In response to appellant's argument on page 14 with regard to claim 35, Best further discloses the masking signal resides in the first portion of the frequency range (1KHz to 6KHz) that is distinct from a second portion of the frequency range in which the data signal resides (bands at 2883Hz and 3417Hz), as stated in the final rejection.

Appellant further argues on pages 15-21 regarding claims 1-2, 4-5, 9-13, and 16-17 that there is no motivation to combine Best et al. and Neubauer et al. This is not persuasive as Best and Neubauer relate to extracting data from an audio signal. Best discloses the notch filters facilitate incrtion of data at frequencies to ensure that no

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music breaks through into the decoding circuits (Col. 2, lines 17-31). And the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as stated in the final rejection, it would have been obvious to one of ordinary skill in the art at the time the invention was made to remove a frequency band around a carrier signal in order to insert coded data in a way to ensure that no music breaks through into the decoding circuits.

Furthermore, Appellant's arguments with regard to claims 1-2, 4-5, 9-13, and 16-17 fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

In response to appellant's argument that there is no suggestion or reason to combine the Neubauer and Best references, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Appellant further argues regarding Claims 7, 8, and 18-19 that Neubauer does not disclose isolating the modulated carrier signal from the audio signal. This is not

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persuasive as Neubauer disclose Fig. 4 blocks 402-412 which extract or remove the frequency portions having no data (i.e., a frequency band surround the carrier frequency) modulated therein from the input signal containing modulated data (Col. 13, lines 5-14).

As these are the totality of arguments presented, and they have been found unpersuasive, the existing rejection is deemed appropriate.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Xu Mei/

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